



Waste~Less News

May
2000

Waste Management News for Southwest Washington

Solid Waste and Financial Assistance Program Waste Prevention, Reduction, and Recycling Award Winners



On May 2nd, Ecology announced the winners of their Waste prevention, reduction and recycling awards. These awards are given in six categories for the most significant contribution to recycling in the state. Successful and innovative programs, facilities, activities, and personnel, in both federal and local government as well as private industry are eligible for awards.

Best Small-Business Program (under 100 employees): *GenTech Dentist* of Vancouver Washington stands out as a model for dentists' offices throughout the state *and* the country. The dental industry has recently begun recognizing the potential in implementing environmentally friendly practices in day to day operations.

GenTech has made an impressive commitment by establishing systems and policies that greatly reduce the effect on the environment. Using recent technological advances they have been able to:

- Recycle and filter water, reducing water consumption by up to 75 percent.
- Reduce paper usage by 90 percent. Patients fill out one form that is scanned into the system, shredded, then recycled. All charts exist in cyberspace, thus reducing the need for excess paper, folders, and storage space. In addition, most insurance claims are filed electronically.
- Eliminate the release of hazardous sludge into the municipal water supply by contracting with a recycler to remove 99 percent of the amalgam and mercury wastes produced by the removal of fillings.
- Switch to non-polluting, digital x-rays.

Best Large-Business Program (more than 100 employees): *Seattle University*'s solid-waste management activities include waste reduction, recycling, reuse, buying recycled-content products, community education and outreach programs, on-site student learning activities, collaboration with outside businesses, resource conservation, and sustainable building practices.

The campus Surplus Store was established in 1994 and sells surplus furniture, used computers, and other items to the public. A new recycling center, built in 1998, houses the bulk of recycled materials collected on campus. The University diverted 623 tons of recyclable material from the waste stream in 1999. The University saved more than \$330,000 from recycling and other energy-saving programs.

In order to gain support from students and staff, the University has implemented an environmental education program. The activities within the program include a free oil change program, free parking for car-poolers, waste-reduction ideas and prizes, an online newsletter, Earth Week activities, new-employee orientation; and support for student environmental clubs.

In keeping with their ecological mission, Seattle University will build its new student center using the US Green Building Council's "Leadership in Energy and Environmental Design" guidelines.

Best Small-Government Program (population under 75,000): *North Chelan Recycling Center and Chelan Valley Community Service Work Group*. The North Chelan County Recycling Center serves an area 60-miles wide, and a population of less than 10,000 people.

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The recycling center operates drop boxes in three small towns, a drop-off buy-back recycling processing center, curbside collection for businesses in North Chelan County, and an aggressive public-education program. The Community Service Work Group has educated area communities about waste reduction, recycling, and buying recycled items since 1988. The group strives to provide recycling opportunities to rural areas and sponsors cleanup events, collection drives, and compost training.

From 1989 to 1999, the Center recycled more than 20 million pounds of materials from its small, rural population. It organized and implemented the cleanup of the old Chelan Dump and has worked with community groups to hold litter cleanup events in North Chelan County for the past six years.

Best Large-Government Program (population more than 75,000): *The Spokane Regional Solid Waste System* has had exceptional waste-reduction and recycling programs in place for the past 10 years. They are responsible for creating and managing waste programs for the entire county that serve more than 400,000 people.

Spokane has boasted a recycling rate above 40% for the last several years. City and county curbside pickup totals more than 15,000 tons annually. Three full-service transfer stations recycle another 3,250 tons annually. Convenient and inexpensive yard waste drop-off and composting sites recycle another 27,000 tons of material that is wholesaled to nurseries throughout Spokane.

In 1999, information publicizing the System's business-waste audit program was sent to more than 1,250 companies. Consequently, 42 detailed audits were performed and as a result, the weight diverted from the city's commercial waste stream is estimated at 5,244 tons.

Best Federal Facility: *The US Department of Energy* for its solid waste recycling at the ***Hanford Site***. With more than 10,000 employees and covering approximately 560 square miles, Hanford's enormous infrastructure could potentially generate large quantities of solid waste.

To counter this, the US Department of Energy has established goals to encourage pollution prevention and resource conservation. One such goal is to recycle at least 33 percent of the materials that would otherwise be disposed as solid waste. Hanford is now recycling twice that amount (63%) annually. Hanford recycling programs transferred more than 2.6 million pounds of recyclable material to offsite recyclers in 1999. Considering current waste-disposal costs, more than one million dollars in savings has been achieved.

Pollution prevention, source reduction, re-use, and recycling have all been integrated into the day to day activities at Hanford over the past 10 years. Materials that are recycled include fluorescent lamps, office furniture, mercury switches, cardboard, batteries, propylene glycol, light ballast, scrap metal, software, pallets, tires, and, of course, paper.

Special Recognition Award for Achievement: Nearly five years ago, *the City of Richland* established an environmental education program. The city's goal was to develop an outreach program that would encourage and promote solid waste reduction, reuse, recycling, composting, household hazardous-waste disposal, and basic environmental awareness.

The city hired Gail Baasch as its Environmental Education Coordinator. She created an extensive and successful program that reaches thousands of citizens through workshops and presentations. Gail works in partnership with other community agencies to achieve these goals.

The program includes a grant-funded Shop SMART workshop, and composting workshops. The Tri-Cities Earth Day, organized by the City of Richland, boasts numerous beautification projects, hikes, tours, contests, collection events, and a park celebration. This year's event included 90 exhibit booths, two stages of entertainment, river activities, and a national championship skydiving team.

Clark County 1999 Waste Stream Analysis Report

Clark County will be releasing the results of the 1999 Waste Stream Analysis in June. The environmental consulting firm of Green Solutions conducted this study. It examined the quantity and composition of the solid waste discarded by homes and businesses in Clark County at the County's two transfer stations in 1999. The primary purpose was to collect data on the effectiveness of the County's existing waste reduction and recycling programs.

Results and Conclusions

The waste characterization study estimates that:

- Clark County households and businesses discarded an estimated 45 million aluminum cans in 1999. If stacked end-to-end, this many cans would stretch from Vancouver, WA to New York City (3550 miles). If recycled, these cans would be worth hundreds of thousands of dollars.
- 59,100 tons of discarded material could have been recycled in curbside programs or dropped off for free, except yard waste, at the two county transfer stations. These materials include newspaper, cardboard, other recyclable paper, plastic bottles, all metals, glass bottles, and yard waste. These materials represent 27.3% of the waste stream.
- Residents of single-family homes discarded 31.3% of the County's total garbage, accounting for 67,800 tons in 1999. County reports show that 24,215 tons of recyclable material was collected from 64,000 homes in 1999. This works out to a **26% recycling rate** for single-family homes. If recycling programs could collect all of the remaining recyclable materials discarded from homes (16,200 tons), the recycling rate would be 44% and would still be below the 50% goal for the County. Additional materials will need to be recycled to meet the County's goal.
- Apartments discarded 9.9% of the overall garbage, accounting for 21,400 tons disposed during 1999. County reports show that 2,665 tons of recyclable material was collected from 24,000 apartment units in 1999. This works out to an **11% recycling rate** for apartments. If recycling programs could collect all of the remaining recyclable materials discarded from apartment units (6,658 tons), the recycling rate would only be 39%. Additional materials will need to be recycled to meet the County's 50% goal.
- Homes and business discard 31,400 tons or 62.8 million pounds of food annually. Food waste represents 14.5% of the entire waste stream, or slightly more than one-half pound of food waste per person per day.
- 10,200 tons of cardboard is thrown away each year. Business and other non-residential sources, including non-residential self-haul, account for two-thirds of the total cardboard discarded.
- 13.3 million pounds of diapers are dumped annually. This is almost as much as the yard waste or all of the glass that is thrown away in Clark County each year.
- Plastic as a percentage of the overall waste stream continues to increase steadily, increasing from 10.4% in 1993 to 11.6% in 1995 to 12.9% in 1999. An estimated 14,700 tons of plastic packaging and 1,700 tons of expanded polystyrene were discarded in 1999.
- Hazardous waste, such as paints, solvents, motor oil, adhesives, oil filters, batteries, fertilizers, and gas cylinders, accounted for 1,500 tons or 3 million pounds per year discarded at the two transfer stations. During 1998, 1.5 million pounds of hazardous waste was collected at the transfer stations, mobile collection events, curbside oil collection, and other oil drop off locations. This equates to a **33% recycling rate for hazardous waste**.

If you would like to learn more about the study, please contact Pete Dubois-Clark County at pete.dubois@co.clark.wa.us or (360) 397-6118, ext. 4961, or Rick Hlavka-Green Solutions at rickhlavka@aol.com or (360) 897-9533.



Housecleaning Binge Overwhelms Seattle Recycling Companies

Seattle (AP)-The response to a new municipal recycling program that started just in time for spring housecleaning has overwhelmed trash haulers.

In the first two weeks of the program (which began this month) the volume of plastics, metal cans, and discarded paper was about 50% more than expected, city officials say.

As a result, trucks were filled faster, drivers made more trips to the sorting stations, and pickup runs that were scheduled to end at 5 p.m. were extended to 8 or 9 p.m. Daily complaint calls to Seattle Public Utilities in the period rose to 1,500, three times the average of 500.

The dust appeared to be settling Monday with complaints down to about 800 as routes were adjusted, additional drivers assigned, and volume appeared to be declining, said Ed Steyh, the city's solid waste contract manager.

Plastic bags, plastic food tubs, and cardboard milk cartons were added to the recycling program this month, but officials at Waste Management (responsible for pickups at 76,000 north end houses) blamed a spring cleaning frenzy for the overload.

"They were loading everything they could," said Jerry Hardebeck, the company's district manager.

Earth Day Poll Compares Attitudes of Boomers and Internet Generation

A poll conducted by Environmental Defense (formerly EDF) finds that a majority of baby boomers and the "Internet generation" interviewed have participated in an Earth Day event (Internet-62%; Boomers-54%), and believe these events have raised their awareness of environmental issues (I-69%; B- 64%).

When asked if environmental conditions are better or worse today than on the first Earth Day 30 years ago, 62% of the 18-25 year-olds polled (a total of 500 people) view conditions as worse today and 29% said they are better. The 45-55 year-olds polled (an additional 500 people) had 52% seeing things as worse and 45% seeing them as better. Both groups believe - by wide margins - that water and air quality continue to worsen.

How can we solve environmental problems?

The majority of both groups (87% Internet Generation, 88% Boomers) point to individual action and public education as the most effective approaches. While only a third in each group has searched the Internet for environmental information, the majority believes that it will have a positive effect on the environment (I-positive 60%/negative 9%; B- positive 55%/negative 5%).

Fred Krupp, executive director of Environmental Defense, expressed surprise by the results: "We undertook this effort expecting to find significant differences between the generations and while they exist, we were struck more by the similarities. A clear challenge for the next 30 years is finding the ways to engage these individuals on behalf of the planet." More poll information can be found at:

<http://www.environmentaldefense.org/poll>

Waste-Less News appears quarterly. The Southwest Regional Office of the Department of Ecology is solely responsible for the accuracy of the information contained herein. Ecology is an equal opportunity agency. If you have special accommodation needs, contact Shelly McClure at (360) 407-6398 (Voice) or (360) 407-6306 (TDD).

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Massachusetts to Ban Computer Dumping

BOSTON (AP) - Electronics lovers on an endless search for a sharper picture will find it harder to get rid of the relics of their quest in Massachusetts, which began the first state ban on dumping video monitors Saturday. State environmental officials are trying to head off a flood of potentially toxic electronic junk from computer screens and televisions into the state's landfills and incinerators. Six collection centers have been established to accept cathode ray tubes for recycling, the Massachusetts Department of Environmental Protection (DEP) said.

The DEP also pledged to pay for recycling cathode ray tubes in 113 municipalities this year, covering almost half the state's population. The average cathode ray tube contains 5-8 pounds of lead, which can pose a threat if it is released into the environment. The state says, as long as a picture tube's screen is intact, it can be safely recycled. The state estimates residents already dispose of 75,000 tons of electronic equipment in landfills or incinerators. That figure is expected to grow to 300,000 tons by the year 2005 if nothing is done.

The state hopes the ban will also encourage people to recycle other computer components, such as the central processing unit. Circuit boards and batteries inside computers contain toxic heavy metals such as cadmium and mercury. If these items are tossed in the trash, the toxic chemicals could end up seeping into groundwater or spewed in the air by a trash-burning incinerator. DEP officials said they are concerned that the advent of higher-quality televisions could send many old TVs to the dump by 2006. "We're trying to get this program in place before the future tidal wave of electronics hits," said Robin Ingenthron, strategic planner with the DEP. For more information visit the Massachusetts Department of Environmental Protection website at: <http://www.magnet.state.ma.us/dep>

Wasting and Recycling in the United States in 2000

There is a new report out, prepared for Grassroots Recycling Network (GRRN) by Brenda Platt and Neil Seldman, Institute for Local Self-Reliance. It is downloadable on the web by visiting <http://www.grrn.org/w2kinfo.html>. Some report highlights are:

- Provides a comprehensive look at wasting and recycling in the United States.
- Municipal recycling and reuse nearly tripled in the U. S. over the past 20 years, reaching a 28% recycling rate by 1998.
- Benefits of recycling are greater than previously thought. They go far beyond saving landfill space and include reduced global warming from greenhouse gas emissions, saving the equivalent of vast forests every year, and supporting a multi-billion industry with sustainable jobs.
- However, recycling is dwarfed by wasting, which is rising again after several years of leveling off. Wasting -- burying or burning discarded resources -- results in the extraction and processing of new resources, and attendant pollution. Municipal waste going to landfills and incinerators is just the tip of the waste iceberg.
- Progress in recycling is threatened. Dropping recycling rates, industry backsliding on recycling commitments, lack of manufacturer responsibility for waste, and subsidies for recycling's competition all hinder further progress.
- Recycling competes on an unlevel economic playing field with virgin material extraction and wasting. Prices of virgin materials and products exclude billions of dollars in taxpayer subsidies and environmental and public health costs of extraction and processing. Landfill prices do not reflect the true cost of perpetual landfill maintenance and monitoring.
- Zero waste goals offer a new approach, challenging the inevitability of waste. Pursuing zero waste encourages sustained economic health, environmental protection, and conservation of taxpayer dollars. Leading activists, public officials, and businesses in the United States, Australia, and New Zealand embrace the zero waste goal.

The Electronic Junk Pile

(Excerpted from an article written by **Rick Hepp**, Tacoma News Tribune Staff Writer)

In the next few years, American businesses and consumers will be forced to face a hidden problem--the growing amount of electronic trash that's collecting in our storage rooms, attics, and basements. Experts estimate that as many as 75% of the 61 million computers that became obsolete in the last three years are still being stored in warehouses, businesses, and homes. They expect 315 million computers to be obsolete by 2004.



Add to that the tens of millions of television sets expected to be discarded once digital television kicks in and dealing with the problem of consumer electronic waste could be a mountainous task.

"We may be at the beginning of a major wave as households across the country convert to new technologies," said Michael Shapiro, a deputy assistant administrator at the Environmental Protection Agency. "There is a concern on how quickly that might turn over in the future."

Faced with this growing problem, businesses and government agencies will be challenged to find cost-efficient and environmentally safe method of disposing of consumer electronic junk.

Many people don't even know that computers, monitors, and TVs all contain toxic materials and potentially dangerous trace elements and heavy metals, said Bud Ward, executive director of the National Safety Council's Environmental Health Center. For example, carcinogenic brominate flame retardants are used in the plastic covers of computers and TVs. Lead is used in monitors and television picture tubes as well as in the soldering used on circuit boards. And, among other heavy metals, trace amounts of cadmium, mercury, and phosphorus are used in the circuitry.

"From an environmental standpoint, (recycling) would save significant resources upstream in terms of mining activities that don't have to happen or have to happen in a less environmentally degrading way," Shapiro said.

Currently, only about 11% of the 24 million desktop PCs that became obsolete in 1999 were recycled or refurbished, according to a National Safety Council study. That number is expected to rise annually. By 2005 the recycling industry will process 9.9 million, or about 16% of the nation's 63.4 million obsolete computers.

To spur computer recycling, especially in the case of monitors (which contain lead) the EPA will propose a waste management regulation for businesses later this year and expects to implement it in 2001. The regulation would streamline the hazardous waste requirements on businesses that dispose of more than 200 pounds of computer monitors or televisions a month. The glass panels, or cathode ray tubes, used in monitors and TVs, contain high levels of lead, which is used to shield people from the radiation produced by them. If businesses opt to recycle the monitors, they would be allowed to forgo the costly process of filing for a hazardous waste permit to transport the material to a landfill.

While the EPA's proposal is designed to facilitate recycling, Smith, head of the San Jose California-based Silicon Valley Toxics Coalition, called it just another way to deregulate an industry that needs more supervision, not less. The proposal would "reduce cost without establishing producer responsibility and without establishing infrastructure to be able to do it," Smith said. "They try to reduce cost without establishing the mechanisms to make sure that things are done in an environmentally safe way." Instead, Smith recommended making manufacturers financially and legally responsible for their products. "Once that happens, it's going to become part of the bottom-line equation of the producers to have to pay for all the problems they are creating," he said. "Then they'll see it's in their own economic interest to redesign the products that they're making."

What is Product Stewardship?

Product Stewardship, sometimes called Extended Product Responsibility (EPR), is defined by the Northwest Product Stewardship Council (NWPSC) as: *A principle that directs all actors in the life cycle of a product to minimize the impacts of that product on the environment.* Under Product Stewardship, all participants in the product life cycle --designers, suppliers, manufacturers, distributors, retailers, consumers, recyclers, and disposers -- share responsibility for the environmental effects of products.



The U.S. Environmental Protection Agency's Office of Solid Waste has launched its website on Extended Product Responsibility (EPR) <http://www.epa.gov/epr>

The EPR website is designed to inform consumers, businesses, state and local government agencies, and others about product stewardship. EPR is a product-oriented approach to environmental protection that challenges players throughout the product chain to work together to reduce the life-cycle environmental impacts of products. The site provides information on the concept, what initiatives are underway in the U.S. and internationally, and a wealth of related resources such as public-private alliances, academic research, publications, involved organizations, and more.

“As state and local governments in the U.S. struggle to meet waste diversion and recycling goals and to maintain costly but popular recycling programs, interest in European producer take-back policies is increasing. Many state and local governments recognize there is more they can do to make their waste and recycling programs more efficient. However, they also realize that without greater cooperation from product manufacturers and others in the product chain, further gains in waste reduction will be limited. Thus, a growing number of state and local governments are exploring alternative ways to pay for recycling. Still more are considering how to engage others in the product chain to take voluntary actions that will help to increase waste reduction in a cost-effective manner. Experimentation by states in these areas will help us as a country discover which approaches work best for the U.S.”-EPA website

If you are interested in learning more about the NW Product Stewardship Council, contact David Stitzhal, Council coordinator at (206) 723-0528 for visit their website at <http://www.govlink.org/nwpssc>



Ecology Awards Schools for Waste Reduction and Recycling

Twelve Washington public schools will share \$15,000 in cash awards for their recycling and waste reduction efforts.

The awards will be presented at a ceremony in the state capitol rotunda at 10:00 a.m. on May 12. Washington Department of Ecology Deputy Director Dan Silver will present \$2,500 to students and staff from **Cashmere Middle School** and **Discovery Elementary** for having Outstanding Waste Reduction and Recycling programs. **Waldron Island K-12, Toppenish Middle, Sadie Halstead Middle, Walla Walla High, Woodinville High** will each receive \$1,000 awards for their Waste Reduction Programs. **Kendall Elementary, Harmony Elementary, Mt Baker Jr./Sr., Wilson Creek Jr./Sr., and West Valley High** will each receive \$1,000 awards for their Recycling Programs.

Each winning school was judged on the basis of comprehensive, efficient, and innovative approaches to waste reduction and recycling during the 1999-2000 school year. The Terry Husseman Outstanding Waste Reduction and Recycling Public School Award Program was established by the Legislature in 1989 as part of the Waste Not Washington Act.

Mark Your Calendars for the Next Westside Solid Waste Coordinators Meeting!

Date: May 18, 2000 **Time:** 10:00 am – 1:00 p.m.

Location: Department of Ecology Building, 300 Desmond Dr., Olympia WA

European Transportation Recycling Projects – Shari Schaftlein, WADOT, will be presenting a slide show of her European trip that reviews and documents innovative policies, programs, and techniques of using reclaimed materials in road projects and how different countries handle their transportation project waste.

Construction Recycling "Toolbox" – Don't miss this performance! Construction, demolition, and landclearing recycling experts from local, state, non-profit, and industry have developed a wildly entertaining way of presenting their "Toolbox", an authoritative resource leading you to web pages, publications, case studies, best practices and more. We will also have time for a roundtable discussion. There will be goodies but bring your sack lunch if 1:00 p.m. is too late for you to eat. Please come with your questions and comments and remember to RSVP Shelly McClure at smcc461@ecy.wa.gov or 360-407-6398.

The Waste-Less News should not create waste. If we need to make changes to our mailing list, please contact Shelly McClure at (360) 407-6398. If you would like to receive a copy of the newsletter via e-mail please send a message to: smcc461@ecy.wa.gov with the subject line reading, "Please add me to the e-mail distribution list for Waste-Less News".

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